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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,077	08/26/2003	Benny Olesen	M61.12-0543	3373
27366 7590 08/19/2009 WESTMAN CHAMPLIN (MICROSOFT CORPORATION) SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402				
EXAMINER				
DANNEMAN, PAUL				
ART UNIT		PAPER NUMBER		
3627				
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08/19/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/648,077

**Applicant(s)**

OLESEN, BENNY

**Examiner**

PAUL DANNEMAN

**Art Unit**

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 February 2009 has been entered.

### Response to Amendment

2. Applicant has not amended the claims, therefore the claims pending are Claims 1-24 filed on 11 August 2008.

### Response to Arguments

3. The applicant argues *"the Examiner argues that Huang can be used to 'create a number of virtual plans (view points or frames) using historical, current and projected sales data...' Based on this assertion, the Examiner has maintained the rejection of the claims. It would therefore appear implicit in the Examiner's rejection that the Examiner has acknowledge that Huang does not teach two separate plans."* Respectfully the Examiner disagrees, Huang in at least Column 1, lines 52-65 discloses a Decision Support Frame that allows the reuse of processing resources and data to project a view into the supply chain that takes into account the view point of the particular user, such as a plant manager or sales manager. Huang in at least Column 2, lines 5-8 further discloses a scenario management system in which Scenarios can be saved, modified and data transferred between view points or frames. Huang in at least Column 2, lines 15-19 allows the creation of an integrated production, sales and inventory (PSI) plan and provides a projection concerning what is feasible in the production, sales and inventory plan. Huang in at least Column 107, lines 41-58 further discloses a PSI frame where the user can experiment with different Production, Inventory and Sales figures and see the effects caused

by these changes. The user is allowed to select individual products from an aggregation of products and show the numbers for this product alone. Huang in at least Column 107, lines 59-67 further discloses that along with the PSI there is a Temporary PSI (see FIG.60). Huang discloses this as a work area where the user may copy and experiment with the real P, S or I figures and modify them to create new Scenarios 78. Essentially, one of ordinary skill would agree that the use of a PSI plan, a temporary PSI plan and Scenarios represents a plurality of plans.

4. Applicant further argues ***"In contrast to the complex nature of the Huang system, which maintains all of the data in a single plan, the present system simply provides two plans. In order to resolve all conflicts and maintain data integrity, one plan is simply copied into the other plan intermittently so that, intermittently, both plans contain identical data. This is a very simple and straight forward system, in direct contract to the complex and cumbersome system set out in Huang et al. The simplicity arises, at least in substantial part, from the fact that there are two separate and distinct plans that operate separately, and the Examiner has not even asserted that any of the references teach or suggest such a system."*** Respectfully, the Examiner disagrees this is a conclusory statement based on two plans are simpler then one plan and conflicts are handled by copying one plan into another plan versus changing view points. Without an actual demonstration on real data it is impossible to determine the relative complexity of each invention. Huang as disclosed in the response above reuses the same data to create the baseline for any new Scenarios and PSI plans.

5. Applicant argues that ***"Claim 1 specifically states that the first and second master plans have different user interfaces configured to do different things and wherein 'the second master plan [is] intermittently copied to the first master plan to replace the first master plan so the first and second master plans intermittently contain identical data.'*** ***The Examiner has utterly failed to teach or suggest these limitations."*** Respectfully, the Examiner must disagree. Huang in at least Column 6, lines 38-49 discloses that the Decision Support System (DSS) contains the synthesized data drawn from a variety of external supply chain information sources and Supply Chain Information Systems and may maintain a set of data unique to the DSS such as the data derived through the analysis of synthesized data. The DSS Database can be interfaced to the Supply Chain Information Systems to

retrieve (download) the required data and provide updated data, as needed. Huang in at least FIG. 1, FIG.2, FIG.3 and Column 1, lines 61-65 discloses a User Interface that projects a view (a Decision Support Frame) into the supply chain that takes into account the view point of the particular user, such as a plant manager or sales manager. Huang in at least Column 5, lines 46-52 discloses that the DSS has a User Interface to interact with end users through interactive and visual data exchange. Huang in at least Column 50, lines 12-36 further discloses aspects of the various user interfaces which are selectively configured. Huang in at least Column 94, lines 20-35 further discloses the features of the User Interface of the performance Simulator and the configuration of those features.

6. Applicant argues ***"independent claim 1 states that 'the second master plan being intermittently copied to the first master plan to replace the first master plan so the first and second master plans intermittently contain identical data.'** (Emphasis added). The Examiner does not even address this limitation."* Respectfully the Examiner disagrees. Huang in at least Column 2, lines 9-11 discloses that the user is allowed to specify a data domain that limits the data used for a particular view point. Huang in at least Column 7, lines 46-67 and Column 8, lines 1-67 further discloses aspects of the data space relative to the supply chain management: demand, supply and inventory data. Huang in at least Column 13, lines 45-67 further discloses updating the production supply plan based on changes which occur during the PSI process. Therefore, the user can selectively choose to work with the latest data, data from an hour ago, yesterday's data or last week's data.

7. Applicant argues regarding **Claims 8 and 18, 5-7, 9-11, 12-15 and 19-22** the use of a first and second master plan, updating the first master plan with data from the second master plan, the complexity of Huang versus the Applicant's use of two master plans, etc. The Examiner has addressed all these arguments in the responses above.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 1-7** are rejected under 35 U.S.C. 101 because the limitations recite a system per se which may be equated to that of interconnected devices which is defined by its physical structural elements and corresponding functionality. No physical structural elements are recited; the claims are directed to non statutory subject matter. The body of the claims comprises software modules, which are virtual modules not physical structures.

10. **Claims 8-17** are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101.

***Claim Rejections - 35 USC § 103***

11. **Claims 1-3, 5-15, and 18-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al., US 5,953,707, hereafter known as Huang.

**Claims 1, 8 and 18:**

With regard to the limitations:

- ***Master Plan includes actual sales orders, a user interface and simulated sales orders.***
- ***Secondary Master Plan includes actual sales orders, a user interface and production scheduling and inventory control.***
- ***Intermittently the Secondary Master Plan is copied into the Master Plan.***

Huang in at least Column 1, lines 52-65 discloses a Decision Support System with a user interface that allows the reuse of processing resources and data to project a view into the supply chain that takes into account the view point of the particular user such as a plant manager or sales manager. Huang in at least Column 50, lines 12-46 discloses some aspects of the user interfaces for entering forecasts based on current or regular sales, orders, promotional activities, and the like. Huang further discloses in at least Column 2, lines 5-8 further discloses a scenario management system in which Scenarios can be saved, modified and data transferred between view points or frames. Huang in at least Column 2, lines 9-11 discloses that the user is allowed to specify a data domain that limits the data used for a particular view point. Huang in at least Column 2, lines 16-19 further discloses that the present invention allows the creation of an integrated production, sales and inventory (PSI) plan and provides a projection concerning what is feasible in the production, sales and inventory plan. Huang in at least Fig.16 and Column 2, lines 20-24 still further discloses that the present invention will allow the manufacturer, or vendor to plan the supply of goods and services for a customer by integrating all information about a product, including current, past and projected future sales and inventory, into a feasible

replenishment plan. Huang in at least Fig.1 and Column 4, lines 46-67 still further discloses that the Decision Support System (DSS) relies on quantitative models and data analysis routines to provide decision support. For example the production, sales and inventory (PSI) planning process employs models and routines from the library to represent the underlying supply chain abstraction and provide decision support.

Huang in at least Figs.60-61 and Column 107, lines 41-58 further discloses a PSI frame where the user can experiment with different Production, Inventory and Sales figures and see the effects caused by these changes. The user is allowed to select individual products from an aggregation of products and show the numbers for this product alone. Huang in at least Column 107, lines 59-67 further discloses that along with the PSI there is a Temporary PSI (see FIG.60). Huang discloses this as a work area where the user may copy and experiment with the real P, S or I figures and modify them to create new Scenarios 78.

Huang in at least Column 12, lines 50-67 and Column 13, lines 1-7 discloses a Demand Management process by which customers' requirements are characterized with the specification of prevailing uncertainty to develop and maintain customer sales forecasts. As the actual purchase orders arrive, the enterprise attempts to fulfill the customers' requirements to their satisfaction. Information from different sources is used to manage the demand requirements such as (Huang, Column 19, lines 62-67 and Column 20, lines 1-12) POS (point of sale data and shipment history), inventory data (relative to the inventory position of its product at the customer's stocking points), market data corresponding to various quantitative information usually provided by external entities such as Nielsen related to the sales of the type of product considered in the entire market and customer forecasts.

Huang in at least Column 13, lines 9-44 further discloses the PSI Planning process used to determine a set of feasible sales, production and inventory requirements with a continuous effort to update the existing PSI plan to accommodate changes in the requirements before and after a series of planning meetings where inputs from various sources, resolution of possible conflicts,



and balancing the concern of different functions to reconcile, develop and approve a new set of feasible sales, production and inventory requirements.

Huang in at least Column 6, lines 38-49 discloses that the Decision Support System (DSS) contains the synthesized data drawn from a variety of external supply chain information sources and Supply Chain Information Systems and may maintain a set of data unique to the DSS such as the data derived through the analysis of synthesized data. The DSS Database can be interfaced to the Supply Chain Information Systems to retrieve (download) the required data and provide updated data, as needed. Huang in at least FIG. 1, FIG.2, FIG.3 and Column 1, lines 61-65 discloses a User Interface that projects a view (a Decision Support Frame) into the supply chain that takes into account the view point of the particular user, such as a plant manager or sales manager. Huang in at least Column 5, lines 46-52 discloses that the DSS has a User Interface to interact with end users through interactive and visual data exchange. Huang in at least Column 50, lines 12-36 further discloses aspects of the various user interfaces which are selectively configured. Huang in at least Column 94, lines 20-35 further discloses the features of the User Interface of the performance Simulator and the configuration of those features.

Therefore, while Huang does not use the terms Master Plan(s) it would be obvious, at the time of the invention, to one of ordinary skill in the art that Huang provides a Decision Support System to develop a PSI Plan, Temporary PSI Plans and various Scenarios with configurable user interfaces where a qualified user can use current sales as well as projected sales to project how different resources will be impacted by changes in projected or future sales orders.

**Claims 2-3, 9-11 and 19-21:**

With regard to the limitation:

- ***Secondary Master Plan is updated daily and copied to Master Plan.***

Huang does not disclose updating the present sales from the current plan into the future plan with the projected sales on a daily basis, per se. However, Huang in at least Column 6, lines 36-67 discloses a DSS (Decision Support System) Database containing synthesized data drawn from a

variety of external supply chain information sources and a Supply Chain Information Systems retrieving the required data and providing updated data, as needed. The DSS Database can be interfaced to the Supply Chain Information Systems to retrieve (download) the required data and provide updated data, as needed.

Huang in at least Column 13, lines 9-43 discloses the PSI (production, sales and inventory) Plan, its initial creation based on long-term top-down sales forecast and budget plan and the continuous effort to update the existing PSI plan to accommodate the changes in the requirements before and after a series of monthly PSI planning meetings.

**Claims 5-7, 12-15 and 22:**

With regard to the limitations:

- ***Master Plan user interface only allows simulated sales orders to be entered.***
- ***Simulated sales orders may only be entered in Master Plan.***
- ***Master Plan and Secondary Master Plan operate independently except when Secondary Master Plan is updated and copied to Master Plan.***
- ***Secondary master plan operates without regard to simulated sales orders.***

Huang does not specifically disclose all the user interface controls per se. However, Huang in at least Column 50, lines 12-46 discloses some aspects of the menu driven user interface for entering forecasts based on current or regular sales, orders, promotional activities, and the like. The user is responsible for entering forecasts for specific account/model combinations under his/her responsibility. Huang in at least Column 90, lines 53-67 further discloses that the Decision Support System is a secure system where a userid and password are required for access. Huang further discloses that a DSS System Administrator is responsible for assigning each user to a group and assigning rights to every new account which controls what DSS usage rights each user is entitled to.

Huang in at least Column 29, lines 30-67 discloses that in the PSI Plan the user can utilize an independent mode where the user can edit the production, sales and inventory requirements

separately by disregarding any consistency requirement. Huang in at least Column 91, lines 28-67 further discloses that the data domains are independent of the data source (forecast, point of sales, shipments). Huang in at least Column 95, lines 59-67 and Column 96, lines 1-18 still further discloses that both dependent and independent demand processes are supported.

12. **Claims 4, 16-17 and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claims 1, 18 and 18 above, and further in view of Eisner, US 6,820,060 B1.

**Claims 4, 16-17 and 23-24:**

With regard to the limitation:

- ***Actual sales orders include simulated sales orders with a probability and threshold of being converted to actual sales orders.***

Huang does not specifically disclose the use of a probability that simulated sales orders will be converted to actual sales orders per se. However, Huang in at least Column 12, lines 37-40 discloses given the uncertainty in the medium to long-term sales forecasts, determining whether or not the enterprise should expand, maintain or reduce its production capacity and / or stocks for the critical components. Huang in at least Column 20, lines 50-55 further discloses the use of bottom-up demand forecasting to develop a customer specific sales forecast based on historical shipment to the customer, POS information at the customer location, and the customer's own forecast regarding its future orders.

Eisner in at least Figs. 2, 6 and 7, Column 1, lines 60-67 and Column 2, lines 1-19 discloses a sales probability generator. The sales probability generator utilizes sales information, to determine the account control level that corresponds to a particular stage of a sales cycle. This then used to determine a sales probability and quantify the likelihood of success for each sales account. Huang and Eisner have each disclosed elements which are old and well known in the arts. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in

the art to combine Huang's Decision Support System with Eisner's Sales Probability Forecasting system with the motivation of providing the user with an additional and traditional forecasting tool.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

16 August 2009

/Ramsey Refai/

Primary Examiner, Art Unit 3627